

Claim Amendments:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A heating belt comprising:
a flexible support comprising material from the group consisting of polymer fibers, graphite fibers, ceramic fibers, and glass fibers; and ~~coated with~~
a composite material coated on the flexible support, the composite material comprising a polymer and inductively-heatable particles.
2. (Original) The heating belt of claim 1, wherein the polymer forms a matrix phase in which the inductively-heatable particles are distributed.
3. (Original) The heating belt of claim 1, further comprising a layer overlying the polymer.
4. (Original) The heating belt of claim 1, wherein the inductively-heatable particles comprise ferromagnetic particles.
5. (Previously presented) The heating belt of claim 1, wherein the inductively-heatable particles are selected from a group consisting of SrF, zirconium alloy, and compounds stoichiometrically having two divalent cations combined with one of $\text{Ba}_1\text{Fe}_{16}\text{O}_{26}$, $\text{Ba}_2\text{Fe}_{12}\text{O}_{22}$, and $\text{Ba}_3\text{Fe}_{24}\text{O}_{41}$.
6. (Original) The heating belt of claim 5, wherein the divalent cations are selected from the group consisting of Mg, Co, Mn, and Zn.
7. (Original) The heating belt of claim 1, wherein the inductively-heatable particles have a Curie temperature.

8. (Original) The heating belt of claim 7, wherein the Curie temperature of the inductively-heatable particles is between 60 °C and 325 °C.
9. (Original) The heating belt of claim 1, wherein the inductively-heatable particles comprise between about 10 volume percent and about 50 volume percent of the composite material.
10. (Original) The heating belt of claim 1, wherein the polymer has a carbon-based chain structure or a silicone based chain structure.
11. (Previously presented) The heating belt of claim 1, wherein the polymer has a carbon-based chain structure and is selected from the group consisting of poly(etheretherketone) (PEEK), polyetherketoneketone (PEKK), poly(etherimide) (PEI), polyphenylene sulfide (PPS), poly(sulfone) (PSU), polyethylene terephthalate (PET), polyester, polyamide (PA), polypropylene (PP), polyurethane (PU), polyphenylene oxide (PPO), polycarbonate (PC), PP/mxd, PP/ethylene vinyl alcohol (EVOH), polyethylene (PE), fluorinated ethylene propylene (FEP), polytetrafluoroethylene (PTFE), polyimide, polyamide-imide (PAI), tetrafluoroethylene (TFE), hexafluoropropylene (HFP), perfluoropropyl or perfluoromethyl vinyl ether, homo and copolymers having chlorotrifluoroethylene (CTFE), homo and copolymers having vinylidene fluoride (VF₂), homo and copolymers having vinyl fluoride (VF), and combinations thereof.
12. (Original) The heating belt of claim 1, wherein the polymer comprises a polyimide.
13. (Original) The heating belt of claim 1, wherein the polymer comprises a fluorinated polymer.
14. (Original) The heating belt of claim 13, wherein the fluorinated polymer comprises at least one material from the group consisting of polytetrafluoroethylene (PTFE) and fluorinated ethylene propylene (FEP), perfluoroalkoxy (PFA), and combinations thereof.
15. (Original) The heating belt of claim 1, wherein the polymer comprises silicone.

16. (Original) The heating belt of claim 1, wherein the flexible support comprises a woven fabric.

17. (Currently amended) The heating belt of claim ~~[[16]]~~ 1, wherein the ~~fabrie~~ the ~~polymer fibers are selected comprises at least one fibrous material~~ from the group consisting of ~~glass,~~ aramids~~[[,]]~~ and polyesters.

18. (Original) The heating belt of claim 1, wherein the heating belt is a closed loop belt.

19. (Original) The heating belt of claim 1, wherein the heating belt is a cooking belt.

20. (Original) The heating belt of claim 1, wherein the heating belt is an industrial sealing belt.

21. (Original) The heating belt of claim 20, wherein the industrial heating belt is a side sealing belt.

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Currently amended) A heating component comprising:

a flexible support comprising a material selected from the group consisting of polymer fibers, graphite fibers, ceramic fibers, and glass fibers; and

a composite material coated on the flexible support, the composite material comprising a silicone polymer and inductively-heatable particles, wherein the heating component is a cooking belt.

35. (Currently amended) A heating component comprising:

a flexible support comprising a material selected from the group consisting of polymer fibers, graphite fibers, ceramic fibers, and glass fibers; and

a composite material coated on the flexible support, the composite material comprising a silicone polymer and inductively-heatable particles, wherein the heating component is an industrial sealing belt.

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Currently amended) A system for heating an article, the system comprising:

a heating belt comprising:

a flexible support comprising a material selected from the group consisting of polymer fibers, graphite fibers, ceramic fibers, and glass fibers; and coated in
a composite material coated on the flexible support, the composite material comprising a polymeric matrix and inductively-heatable particles; and a field generator for inducing a field about the heating belt to heat the inductively-heatable particles.

41. (Original) The system of claim 40, wherein the article is a food item.

42. (Original) The system of claim 40, wherein the article is a package.

43. (Original) The system of claim 40, wherein the system is an industrial side sealing apparatus.

44. (Original) The system of claim 40, wherein the system is an industrial grill.

45. (Currently amended) A method for heating an article, the method comprising: placing the article in proximity to a heating belt, the heating belt comprising a flexible support comprising a material selected from the group consisting of polymer fibers, graphite fibers, ceramic fibers, and glass fibers, and coated in a composite material coated on the flexible support, the composite material comprising a polymeric matrix and inductively-heatable particles; and inducing a field about the heating belt, the inductively-heatable particles heating in the presence of the field, thereby heating the article.

46. (Original) The method of claim 45, wherein the article is on the heating belt.

47. (Original) The method of claim 45, wherein the article is a food item.

48. (Original) The method of claim 45, wherein the article is a package.

49. (Original) The method of claim 45, wherein the flexible support comprises glass fibers.

50. (Original) The method of claim 45, wherein the polymer matrix is a fluorinated polymer, silicone, or polyimide.

51. (New) The heating belt of claim 1, wherein the fibers comprise an intermeshing of random fibrous strands.

52. (New) The heating belt of claim 1, wherein the polymer fibers comprise high melting point thermoplastic material.

53. (New) The heating belt of claim 52, wherein the high melting point thermoplastic material is selected from the group consisting of thermoplastic polyimides, polyether-ether ketones, poly aryl ketones, polyphenyl sulfide, and polyetherimides.

54. (New) The heating belt of claim 1, wherein the flexible support comprises the polymer fibers, the polymer fibers including high temperature capable thermosetting resin.

55. (New) The heating belt of claim 54, wherein the high temperature capable thermosetting resins include polyimides.